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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/473,522	12/28/1999	KENNETH A. PARULSKI	78744PRC	1080
1333 7590 02/09/2007 PATENT LEGAL STAFF EASTMAN KODAK COMPANY 343 STATE STREET ROCHESTER, NY 14650-2201			EXAMINER GYORFI, THOMAS A	
			ART UNIT 2135	PAPER NUMBER
			MAIL DATE 02/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/473,522

Applicant(s)

PARULSKI ET AL.

Examiner

Tom Gyorfi

Art Unit

2135

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 25 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-25.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

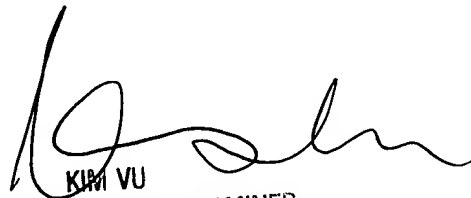
(Continuation of 7) The arguments presented in the amendment are substantially identical to those presented in the amendment of 8/28/06, and were traversed by the Examiner in the Final Office Action of 10/20/06 (see pages 2-3). Examiner refers Applicant to those remarks in response to Applicant's current amendment, with the following clarification(s):

With respect to Applicant's arguments on pages 3-4, Examiner maintains that the limitations in question are disclosed by Safai; however on page 2 of the Final Office Action of 10/20/06, Examiner erroneously referred to the Safai reference as "Seid". Examiner apologizes for the typographical error. It is also noted that those of ordinary skill in the art would have recognized that it is inherent to asymmetric cryptography that the complex mathematical relationship between a public and private key in an asymmetric key pair necessitates that they be generated simultaneously; therefore, the public key is implicit in the creation of the private key.

Examiner once again reminds Applicant that just because the disclosed embodiment of Noll uses lava lamps, it does not preclude the use of alternate sources of chaotic randomness - to the contrary, Noll explicitly discloses and encourages doing so (col. 4, lines 43-45).

With respect to Applicant's argument on pages 4-7 of the amendment that the references, and Eastlake in particular, do not disclose generating a key entirely from the sensor noise of a digital camera, this allegation is incorrect. Examiner notes that the instant specification defines this step as taking a picture with the shutter closed (i.e., the image sensor of the camera is fully obstructed by a separate component: page 9, lines 12-15). Similarly, Eastlake discloses this same limitation as a general well known fact in the art, save the trivial distinction that the source of the obstruction in Eastlake is a lens cap (Eastlake, page 14, "The 'input' from a...camera with the lens cap on, if the system has enough gain to detect anything, is essentially thermal noise"; see also page 10, "5. Hardware for Randomness" wherein thermal noise is disclosed as being suitable for generating random bits for the purpose of key generation). At the very least, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to modify Silverbrook (and by extension, Safai in view of Silverbrook) to alter the Noll component of Silverbrook to use the thermal noise generated entirely by the image sensor of an Eastlake camera as the source for the randomness, not only for the reasons previously cited in the aforementioned Final Office Action but also because one can achieve a strong \*portable\* source of randomness (Eastlake, page 10, "5. Hardware for Randomness"). Examiner submits that an explicit recitation of portability as an advantage of generating random bits entirely with an image sensor of a camera - an advantage that Examiner agrees with Applicant would not be present if Silverbrook were strictly limited to using lava lamps to achieve the same effect - thus displaces Applicant's arguments that Examiner's motivation to combine the references was conclusory in nature. It is further noted that the cameras of both Safai and Silverbrook qualify as "computers" under the broadest reasonable definition of the term (cf. Safai, col. 1, lines 25-30 and all of col. 6; Silverbrook, col. 17, line 53 - col. 21, line 53)., and thus the teachings of Eastlake would apply to the onboard computer systems possessed by both cameras.

Examiner respectfully maintains the claimed invention is unpatentable, and welcomes the opportunity to further expound on the merits of the prior art over the claims in an Examiner's Answer.



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